

# Draft Environmental Assessment



**Reservoir Creek Beaver Transplant**



***Montana Fish,  
Wildlife & Parks***

# **Pre-Draft Environmental Assessment MEPA, NEPA, MCA 23-1-110 CHECKLIST**

## **PART I. PROPOSED ACTION DESCRIPTION**

**1. Type of proposed state action:** Montana Department of Fish, Wildlife and Parks (FWP) and the Bannack Grazing Association propose to transplant up to 6 beavers (*Castor canadensis*) into Reservoir Creek, approximately 26 miles southwest of Dillon. The proposed action would create two to four beaver dam analogues (man-made dams) and 2 to 4 slash piles in suitable habitat in Reservoir Creek and on Association property. Beaver would be acquired from the Grasshopper or Warm Springs Creek drainages in cooperation with private landowners, trappers, and Bannack State Park. Two culvert crossings on Reservoir Creek Road will be examined and fitted with structures engineered to prevent culvert blockage and road flooding as necessary.

**2. Agency authority for the proposed action:**

### **87-1-201 Montana Code Annotated (MCA) Powers and Duties**

*(1) Except as provided in subsection (12), the department shall supervise all the wildlife, fish, game, game and nongame birds, waterfowl, and the game and furbearing animals of the state and may implement voluntary programs that encourage hunting access on private lands and that promote harmonious relations between landowners and the hunting public. The department possesses all powers necessary to fulfill the duties prescribed by law and to bring actions in the proper courts of this state for the enforcement of the fish and game laws and the rules adopted by the department.*

### **87-5-711 MCA-Control of importation for introduction and transplantation or introduction of wildlife.**

*(1) Except as otherwise provided, the importation for introduction or the transplantation or introduction of any wildlife is prohibited unless the commission determines based upon scientific investigation and after public hearing, that a species of wildlife poses no threat of harm to native wildlife and plants or to agricultural production and that the transplantation or introduction of a species has significant public benefits.*

*Transplantation is defined as the release of or attempt to release, intentional or otherwise, wildlife from one place within the state into another part of the state.*

*Beaver are a state classified game animal (furbearer) and are not included in the list (87-5-714) of species allowed to be transplanted, therefore they require Fish and Wildlife Commission approval on a site-specific basis with an associated EA.*

### **87-5-714 MCA-Wildlife species authorized for introduction and transplantation.**

*(2) The commission may by rule and subject to the provisions of 87-5-711 authorize the department to transplant or introduce species of wildlife not listed in subsection (1).*

**87-5-715 MCA-Extinction or control of transplanted or introduced wildlife or feral species posing threat.**

*Any wildlife or feral species transplanted or introduced in the state may be exterminated or controlled by the department if the commission determines that the species poses harm to native wildlife or plants or to agricultural production.*

**BEAVER POLICY (PROPOSED)** (1) The following procedure will be used in transplanting beaver (*Castor Canadensis*):

- (a) Beaver, for all transplants in Montana, shall be wild-trapped from existing populations in Montana as approved by the Fish and Wildlife Commission.
- (b) Proposed beaver transplants will be investigated by the local wildlife biologist. An evaluation of the proposed release site will be conducted that includes a biological reconnaissance indicating suitability of the area with reference to habitat requirements of beaver. The evaluation shall be considered for review by the local fisheries biologist to provide recommendations concerning the proposed transplant.
- (c) A signed statement of landowner concurrence from the proposed beaver removal area, transplant site, and from landowners up and downstream immediately adjacent to the proposed transplant site will be a required document. Signed statement documents are the responsibility of the party requesting the beaver transplant.
- (d) All beaver captured for translocation will be tested for the complete list of diseases established by the FWP veterinarian and assessed to be free of the diseases prior to translocation.
- (e) An environmental assessment (EA) is required to evaluate any impacts of the proposed transplant and to notify and solicit comments from the public, municipalities, and government agencies. The EA and comments will be provided to the Fish and Wildlife Commission for their decision-making process and final action.
- (f) Beaver will not be transplanted into areas where existing beaver occur or are near enough that it can logically be assumed that beaver will disperse to the proposed transplant site.
- (g) Transplants shall be conducted from July through September, and a record of all transplants, including date released, number released, sex and age, tag numbers, source of stock, and transplant location will be maintained by the Department.

**3. Name of project:** Reservoir Creek Beaver Transplant

**4. Name, address and phone number of project sponsor (if other than the agency):**

Bannack Grazing Association  
11830 Highway 324  
Dillon, MT 59725  
406-925-0807

5. **Anticipated Schedule:**

Estimated Construction Commencement Date: July 2018

Estimated Completion Date: September 2020

Current Status of Project Design (% complete):

6. **Location affected by proposed action (county, range and township):** The project is located 26 miles southwest of Dillon in Beaverhead County, Township 8 South, Range 13 West, Sections 14 and 15 (Figure 1).

7. **Project size -- estimate the number of acres that would be directly affected that are currently:**

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(existing shop area)		Irrigated cropland	<u>74</u>
(b) Open Space/	<u>0</u>	Dry cropland	<u>0</u>
Woodlands/Recreation		Forestry	<u>0</u>
(c) Wetlands/Riparian	<u>0</u>	Rangeland	<u>0</u>
Areas		Other	<u>0</u>

8. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

- (a) **Permits:** permits will be filed at least 2 weeks prior to project start.

<u>Agency Name</u>	<u>Permits</u>
--------------------	----------------

- (b) **Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>
Montana FWP	\$600

- (c) **Other Overlapping or Additional Jurisdictional Responsibilities:**

<u>Agency Name</u>	<u>Type of Responsibility</u>
Beaverhead-Deerlodge Forest	Forest Road 1219

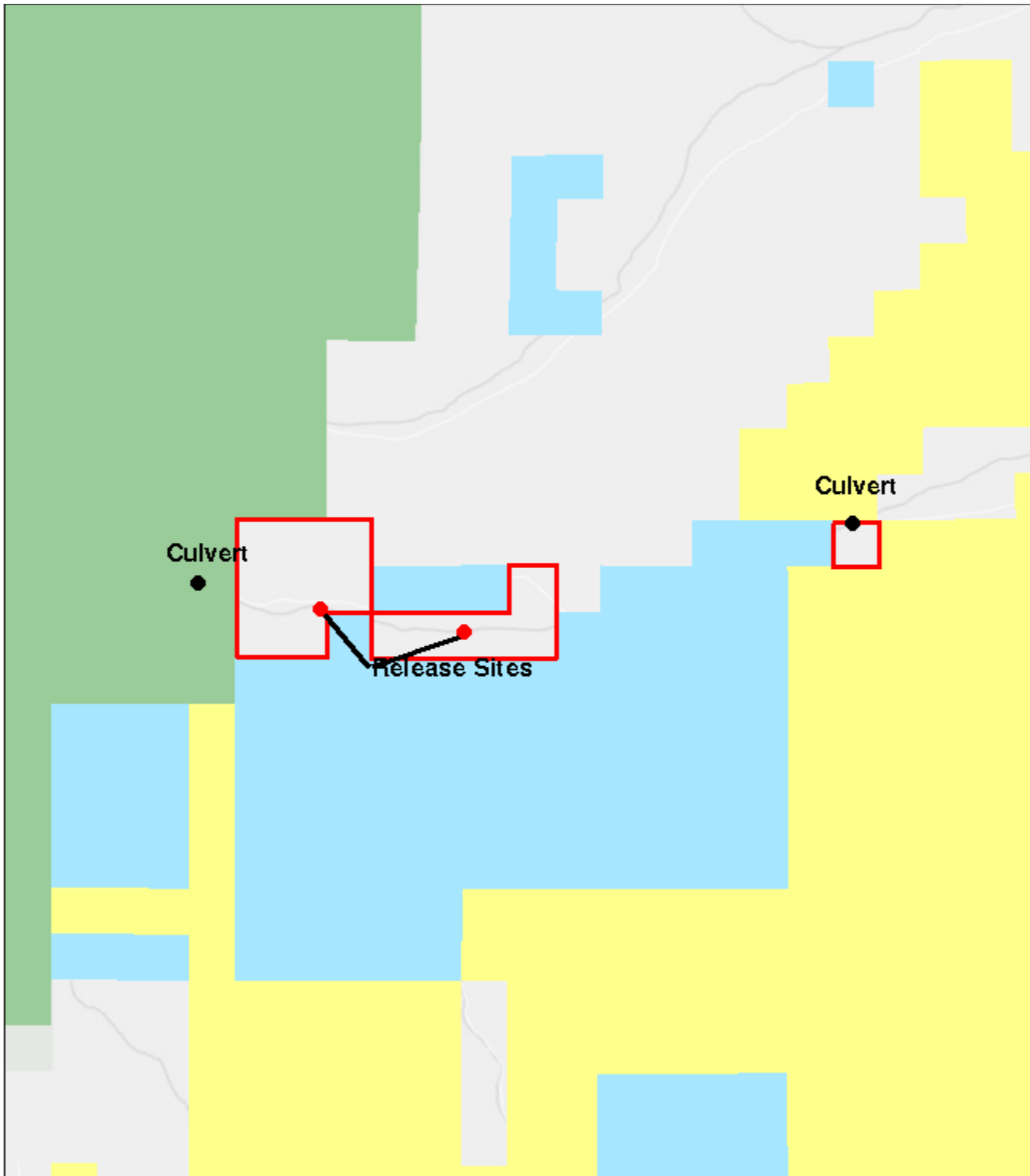


Figure 1. Proposed beaver release sites in Reservoir Creek T8S, R13W, Sections 14 and 15. Red outlines Bannack Grazing Association property that contains suitable beaver habitat. Green indicates USFS, Yellow BLM, Blue Montana DNRC, and white is other private lands.

**9. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:**

The project would restore a native species to suitable habitat in Reservoir Creek. Beaver were extirpated from Reservoir Creek around 1980 (G. McDougal, personal communication).

The Bannack Grazing Association and FWP are seeking the habitat benefit that beavers provide on the landscape including: reduced peak runoff, increased stream channel complexity, and a higher water table. The Bannack Grazing Association accepts that beaver may disrupt irrigation infrastructure on the property in favor of the passive and cost-effective restoration that beaver will bring to the system over time.

Beaver dam analogues and slash piles would be constructed at release sites with available dead aspen to try to overcome predation risk to transplanted beaver and increase the chances of a successful transplant. The analogue dams would provide a deep pool, and the slash would provide hiding cover in the short-term.

Transplant stock would be obtained from the Grasshopper or Warm Springs Creek drainages in cooperation with landowners, trappers, and Bannack State Park. Stock from multiple colonies and of both sexes would be required. Prior to release, beaver would be subject to a health inspection by the FWP Veterinarian.

FWP recognizes that beaver can damage important infrastructure through flooding and is prepared to provide mitigation measures to minimize impacts from the release. Two culverts on the Reservoir Creek Road would be inspected and fitted with structures designed to minimize flooding and road hazards, as necessary.

**10. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:**

**Alternative A: No Action** – Beaver would not be transplanted into Reservoir Creek under the No Action Alternative. Reservoir Creek would continue to function as a relatively straight, simple channel with little capacity to store water, reduce peak flows, or increase the width of the riparian green zone. Colonization of Reservoir Creek by beaver from Grasshopper Creek or other adjacent drainages is unlikely as beaver would have to follow 2.1 miles of dry stream course and another 3.8 miles of creek with no suitable riparian shrubs to construct dams.

**Alternative B: Proposed Action** – Construct 2 to 4 beaver dam analogues and 2 to 4 slash piles to mimic beaver lodges. Live capture and transplant up to 6 beavers from the Grasshopper or Warm Springs Creek drainages following the proposed FWP Policy for transplanting beaver. Examine and protect 2 culvert crossings to Reservoir Creek, as necessary, to prevent road flooding.

## **PART II. ENVIRONMENTAL REVIEW CHECKLIST**

### **3. Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.**

#### **A. PHYSICAL ENVIRONMENT**

1. <u>LAND RESOURCES</u>  Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Soil instability or changes in geologic substructure?		x				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?		x				
c. **Destruction, covering or modification of any unique geologic or physical features?		x				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?				x		1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		x				
f. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (attach additional pages of narrative if needed):**

1d. Beaver dams catch significant amounts of silt and other contaminants over time, and ponds eventually become meadows. The stream channel meanders or becomes braided and more complex as it is repeatedly dammed by beaver. Soil conservation is a desirable benefit that beaver passively and cost effectively create.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

2. <u>AIR</u>  Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)		x				
b. Creation of objectionable odors?		x				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. ***For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)		X				
f. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (attach additional pages of narrative if needed):**

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.



3. <u>WATER</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. *Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			x			3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?			x			3a.
c. Alteration of the course or magnitude of floodwater or other flows?			x			3a.
d. Changes in the amount of surface water in any water body or creation of a new water body?			x			3a.
e. Exposure of people or property to water related hazards such as flooding?			x			3a.
f. Changes in the quality of groundwater?		x				
g. Changes in the quantity of groundwater?			x			3a.
h. Increase in risk of contamination of surface or groundwater?			x			3a.
i. Effects on any existing water right or reservation?		x				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		x				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		x				
l. ****For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		x				
m. ***For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		x				
n. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (attach additional pages of narrative if needed):**

3a. Beaver ponds created by dams may slightly increase water temperature by reducing water velocity and increasing surface area exposed to the sun. The lowest suitable beaver habitat is at an elevation of 6350 feet and is in a zone with a maximum of 30 frost free days and water temperature is not anticipated to exceed water quality standards for temperature. Beaver ponds would reduce turbidity during periods of peaks flows as they reduce water velocity and intercept silt and other contaminants. Beaver dams attenuate periods of high water by storing water and creating increased channel complexity. Water storage will occur within the Reservoir Creek system behind beaver

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

dams and through an increase in groundwater as channels become braided and more complex. All waters in Montana are considered to be contaminated with Giardia, and FWP does not anticipate that introduced beaver will bring any new diseases or organisms to Reservoir Creek. Beaver would be subject to a health inspection prior to transplant. Flooding is a concern at two culvert crossings only, and FWP is prepared to address and maintain structures over time to protect the road from being flooded by beaver dams, as necessary.

- \* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.
- \*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).
- \*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
- \*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

4. <b>VEGETATION</b>  Will the proposed action result in?	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			x			4a.
b. Alteration of a plant community?			x			4a.
c. Adverse effects on any unique, rare, threatened, or endangered species?		x				
d. Reduction in acreage or productivity of any agricultural land?		x				
e. Establishment or spread of noxious weeds?		x				
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		x				
g. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation (attach additional pages of narrative if needed):**

4a. Over time, beaver can have a major impact on preferred deciduous species like aspen, willow, dogwood, and chokecherry. Beaver use these species for food, dam building, and for their lodge. As dams mature, beaver may deplete local resources in the short term and may move on to other suitable habitat. Meadows created by beaver dams rapidly return to deciduous species as the dam raises the water table and traps sediment in a higher water table. Beaver meadows tend to support riparian grasses and sedges that are desirable to both cattle and wildlife. The suitable habitat in Reservoir Creek spans about 4 miles on Association, DNRC, and the Beaverhead-Deerlodge National Forest.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

<b>** 5. FISH/WILDLIFE</b>  <b>Will the proposed action result in:</b>	<b>IMPACT *</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Deterioration of critical fish or wildlife habitat?		x				
b. Changes in the diversity or abundance of game animals or bird species?			x			5b.
c. Changes in the diversity or abundance of nongame species?		x				
d. Introduction of new species into an area?		x				
e. Creation of a barrier to the migration or movement of animals?			x			5e.
f. Adverse effects on any unique, rare, threatened, or endangered species?		x				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			x			5g.
h. ****For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		x				
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		x				
j. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Fish and Wildlife:**

5b. Beaver ponds may be attractive to a variety of bird species like red-winged blackbirds, kingfisher, great blue heron, and birds of prey such as osprey and bald eagles. Aquatic vegetation attractive to moose and mule deer are dependent on forbs that would be expected to increase along Reservoir Creek if the stream becomes more complex and stores more water in the system.

5e. Reservoir Creek contains pure West Slope cutthroat trout. The conservation of this species is a priority for FWP, and the beaver dams could benefit the species by providing overwinter refuge habitat. The spawning area for these fish is not defined, and they are not considered migratory. Beaver dams can impede fish movement to some extent, but the species co-evolved and beaver introduction should provide a net benefit to fisheries management.

5g. FWP considered, but ultimately did not recommend, a temporary closure to beaver trapping for Reservoir Creek as part of this EA. This decision was based on the Bannack Grazing Association being able to regulate trapping on private property, the low value and demand for beaver pelts, and trapping on DNRC land is limited to a single trapper with a Land Use License.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

## B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		x				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Noise/Electrical Effects (attach additional pages of narrative if needed):**

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?						
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?			x			7c
d. Adverse effects on or relocation of residences?		X				
e. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Use (attach additional pages of narrative if needed):**

7c. Beaver can create conflict with human land uses. The Bannack Grazing Association recognizes that conflict with existing irrigation infrastructure is possible. However, they are willing to accept this conflict to realize the ecological and cost-effective benefits that a successful beaver transplant can bring to Reservoir Creek. FWP will also obtain concurrence from the Beaverhead-Deerlodge National Forest and Montana DNRC as the potentially affected upstream and downstream landowners.

Reservoir Creek does not connect to the Grasshopper Creek drainage outside of short periods of very high flows. The likelihood of beaver colonizing Reservoir Creek from Grasshopper Creek is very low as beaver would have to move over 2.1 miles of dry channel and 3.8 miles of creek with no suitable habitat for dams or food.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

8. <b>RISK/HEALTH HAZARDS</b>  Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		x				
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?			x			8b.
c. Creation of any human health hazard or potential hazard?			x			8b.
d. ***For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		x				
e. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Risk/Health Hazards (attach additional pages of narrative if needed):**

8b. FWP recognizes that beaver can flood roads and is prepared to proactively address these impacts with structures designed to prevent flooding at culvert crossings. FWP will build and install cage structures from heavy gauge livestock panels that deny beaver access to either side of the culvert crossing in Township 8, Range 12 West, Section 7. This structure will require periodic maintenance to remove sticks and vegetation. FWP and USFS personnel will perform this maintenance annually along with other duties in the area including spring sage grouse surveys and fall hunter patrols.

The long-term solution to beaver flooding issues is to enhance the size of culvert from the existing 48 inch to a 60 or 72 inch culvert or a bridge. Both of these options are beyond the scope of the project and are cost prohibitive. When the existing culvert reaches the end of its service life would be the appropriate time to upgrade the structure. A non-profit conservation organization interested in beaver and riparian restoration could also help fund an upgrade to the existing crossing.

The culvert crossing on USFS Road 1219 will be inspected and fitted with a structure if necessary. The gradient on Reservoir Creek is presumed to be too steep to be attractive to beaver at this crossing, but FWP will confirm this when the area is accessible. Road 1219 was not accessible during an April 18, 2018, inventory of suitable habitat and hazards.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

9. <u>COMMUNITY IMPACT</u>  Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		x				
b. Alteration of the social structure of a community?		x				
c. Alteration of the level or distribution of employment or community or personal income?		x				
d. Changes in industrial or commercial activity?			x		Yes	9d.
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?			x		Yes	9e.
f. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Community Impact (attach additional pages of narrative if needed):**

9d. Beaver are considered a keystone species that can have profound effects on the riparian systems they occupy. These effects are desired by the Bannack Grazing Association and FWP. Beaver can positively influence the Association's ability to cost effectively graze the area as well as positively impact the ability of Reservoir Creek to support nongame and game species of fish and wildlife in the future.

9e. Impact to roads and potential traffic hazards are addressed in 8b.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.



10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		x				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		x				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		x				
d. Will the proposed action result in increased use of any energy source?		x				
e. **Define projected revenue sources						10e.
f. **Define projected maintenance costs.						10f.
g. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Public Services/Taxes/Utilities**  
(attach additional pages of narrative if needed):

10e. Revenue will come from FWP Survey and Inventory funds. The estimated cost is \$600 and includes funds to trap and transplant beaver, periodic surveys to determine if the transplant is successful, and construction of any structures to prevent beaver from blocking culvert crossings on the Reservoir Creek Road.

10f. Annual maintenance costs are estimated at \$50. The project will require periodic inspection of structures designed to mitigate road flooding at potentially 2 culverts on Reservoir Creek Road. This work will be accomplished in conjunction with sage grouse monitoring and periodic patrols in the area.

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

<b>** 11. <u>AESTHETICS/RECREATION</u></b>  <b>Will the proposed action result in:</b>	<b>IMPACT *</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		x				
b. Alteration of the aesthetic character of a community or neighborhood?		x				
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		x				
d. ***For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		x				
e. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Aesthetics/Recreation (attach additional pages of narrative if needed):**

- \* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.
- \*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).
- \*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
- \*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		x				
b. Physical change that would affect unique cultural values?		x				
c. Effects on existing religious or sacred uses of a site or area?		x				
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)		x				
e. Other:						

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources**  
(attach additional pages of narrative if needed):

- \* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.
- \*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).
- \*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
- \*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

## SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u>  Will the proposed action, considered as a whole:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		x				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		x				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		x				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		x				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?			x			13e.
f. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		x				
g. ****For P-R/D-J, list any federal or state permits required.		x				

**Narrative Description and Evaluation of the Cumulative and Secondary Effects on Significance Criteria (attach additional pages of narrative if needed):**

13e. FWP does not anticipate substantial debate or controversy from this project. Should such debate or controversy arise, FWP would host an onsite visit to Reservoir Creek or a public meeting to discuss all issues

\* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

\*\* Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

\*\*\* Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

\*\*\*\* Include a discussion about the issue in the EA narrative and include documentation if it will be useful.



**2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:**

Flood control structures at culvert crossings to Reservoir Creek Road.  
Periodic maintenance of structures.

**PART III. NARRATIVE EVALUATION AND COMMENT**

The propensity of beaver to damage irrigation and road infrastructure has limited the number of beaver transplants in Montana. This project is proposed by the landowner and represents an opportunity to demonstrate the ecological benefits that beaver can bring to a riparian system where they have been absent for 40 years.

**PART IV. PUBLIC PARTICIPATION**

**1. Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?**

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- Two public notices in each of these papers: *The Montana Standard* and the *Dillon Tribune*
- One statewide press release;
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>.

Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

**2. Duration of comment period, if any.**

The public comment period will extend for (30) thirty days following the publication of the second legal notice in area newspapers. Written comments will be accepted until 5:00 p.m., June 22, 2018 and can be mailed to the address below:

Montana FWP  
Reservoir Creek Beaver Comments  
730 North Montana St.  
Dillon, MT 59725

Comments may also be emailed to: [cfager@mt.gov](mailto:cfager@mt.gov)

## **PART V. EA PREPARATION**

1. **Based on the significance criteria evaluated in this EA, is an EIS required? NO**  
**If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.**

The EA is the appropriate level of review as the impacts of transplanting beaver to Reservoir Creek are predictable and generally positive. Potential impacts to the road system can be mitigated.

2. **Name, title, address and phone number of the person(s) responsible for preparing the EA:**

Craig Fager  
Wildlife Biologist  
730 North Montana Street  
Dillon, MT 59725  
406-683-9305  
cfager@mt.gov

3. **List of agencies consulted during preparation of the EA:**

Montana Fish, Wildlife & Parks  
Fisheries Division  
Wildlife Division